COMMUNICABLE DISEASE CENTER

Morbidity and Mortality

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WEEKLY REPORT

Week Ending July 24, 1965

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

WESTERN EQUINE ENCEPHALITIS – Colorado

The first confirmed case of Western equine encephalitis in 1965 in a human has been reported from Greeley, Colorado. The patient, a 14-year-old white boy, developed an encephalitic illness on July 12, 1965. Paired sera demonstrated a fourfold rise in hemagglutination inhibition titer to Western equine encephalitis. The patient has recovered.

During the past week reports of clinical horse encephalitis have been coming in from several midwestern and mountain States. Of the 36 cases in horses reported from Colorado, 8 have been serologically confirmed and 5 have resulted in death. The one case of clinical horse encephalitis in California has also been similarily confirmed.

Ten WEE-like agents have been isolated from pools of *Culex tarsalis* collected in the vicinity of Greeley, Colorado, during the week ended July 8, 1965. Nine of these isolates are now confirmed as WEE virus, thus giving *Culex tarsalis* infection rates much higher than those observed during a comparable period last year.

(Continued on page 246)

CONTENTS

Table 1. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	29th WEEK ENDED		MEDIAN 1960–1964	CUMULATIVE, FIRST 29 WEEKS		
	JULY 24, 1965	JULY 18, 1964		1965	1964	MEDIAN 1960–1964
Aseptic meningitis	35	68	65	824	901	901
Brucellosis	6	5	10	133	219	232
Diphtheria	–	3	3	88	154	229
Encephalitis, primary infectious	39	43	---	864	1,046	---
Encephalitis, post-infectious	13	22	---	453	591	---
Hepatitis, infectious including serum hepatitis	558	565	647	19,729	23,131	25,424
Measles	1,910	2,637	3,730	233,962	452,634	382,618
Meningococcal infections	38	39	37	2,082	1,711	1,373
Poliomyelitis, Total	1	–	11	27	53	281
Paralytic	1	–	9	21	42	186
Nonparalytic	–	–	---	6	8	---
Unspecified	–	–	---	–	3	---
Streptococcal Sore Throat and Scarlet fever	4,144	3,763	3,354	257,390	263,425	216,572
Tetanus	8	5	---	132	135	---
Tularemia	5	14	---	138	184	---
Typhoid fever	12	12	16	209	209	289
Rabies in Animals	67	96	71	2,694	2,674	2,266

Table 2. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	6	Rabies in Man:	1
Botulism:	11	Smallpox:	1
Leptospirosis: La.-1, Ark.-1, Tenn.-1, P.R.-1	20	Trichinosis: Calif.-3	69
Malaria:	37	Typhus –	
Plague:	–	Murine:	16
Psittacosis: Ill.-3, Tex.-1	25	Rky. Mt. Spotted: Ill.-2, Mich.-2, Md.-1, D.C.-1, N.C.-2 · Pa.-4, Va.-2, W. Va.-1, Ga.-1, Tenn.-3	133
Cholera: D.C.-1	2		

WESTERN EQUINE ENCEPHALITIS – Colorado

(Continued from front page)

Mosquito population indices in this vicinity are two to four times what they were during the same period last year. The temperature during the spring of 1965 has been unusually cool in the area of Greeley; in past years, high WEE virus activity has occurred when the spring temperature generally has been lower than the seasonal mean. Reports of increased WEE virus activity may be anticipated within the next few weeks.

(Reported by Dr. C.S. Mollohan, Chief, Section of Epidemiology, Colorado State Department of Public Health and Disease Ecology Section, Technology Branch, CDC, Greeley, Colorado.)

ENCEPHALITIS – 1964

Weekly encephalitis case reports are received at the Communicable Disease Center from State and local health departments through the National Morbidity Reporting System. In addition, the Encephalitis Surveillance Unit receives encephalitis surveillance forms which supply more detailed epidemiologic information about each case reported. Cases are reported in two categories: 1) Post-infectious encephalitis, defined as illnesses with encephalitic manifestations but with pre-existing diagnosed infections. Post-infectious encephalitis includes those cases associated with mumps, measles, rubella, vaccinia, etc. 2) Primary encephalitis, defined as acute febrile illnesses with encephalitic manifestations as an intrinsic part of the disease. This category includes "ARBO" infections, as well as acute encephalitis of unknown etiology.

During 1964, a total of 3,587 cases of encephalitis, including 337 deaths, was reported. This represents the highest total of cases reported to the Encephalitis Surveillance Unit in any one year since its establishment in 1955. It includes an increased number of both categories of encephalitis cases during 1964 as compared to 1963. Cases reported for 1964 are shown by etiology in Table 1. Mumps and measles accounted for over three-quarters of the 1,585 post-infectious encephalitis cases. There were 582 cases of arthropod-borne encephalitis and outbreaks due to St. Louis, Western equine, and California encephalitis viruses occurred. It was the first time in 3 years that human illness due to Eastern equine encephalitis virus was encountered.

The numbers of encephalitis cases reported for the years 1960-1964 are shown by month in Figure 1 and by etiologic group in Figure 2. The characteristic pattern of incidence, with an increase in April or May followed by a second peak in the late summer and fall, again occurred during 1964. The highest incidence of cases of post-infectious encephalitis occurred during the spring, whereas the cases due to arboviruses were more prevalent during August and September. A marked increase in cases of encephalitis of unknown etiology also was noted during the latter period. At least some of the reported cases of encephalitis of undetermined etiology may have been unrecognized cases of arthropod-borne encephalitis.

The total of 582 cases of arthropod-borne encephalitis, which occurred during 1964 and which were designated confirmed or presumptive,* is the highest since 1956. During the 10-year period of reporting to the Encephalitis Surveillance Unit, this total was exceeded only in 1956 when 625 cases of arthropod-borne encephalitis were recorded. A summary of the occurrence of arthropod-borne encephalitis by etiology over the past 10 years is shown in Table 2. Cases of St. Louis, Western equine and California encephalitis during 1964 are shown by State in Figure 3.

Table 1
Encephalitis in the United States, 1964
Cases Reported to the
Encephalitis Surveillance Unit, CDC

Etiology	Number of Cases	Percent of Cases
Post-infectious Encephalitis	1,585	44.2
Mumps	932	26.0
Measles	300	8.4
Varicella	106	3.0
Rubella	59	1.6
Influenza	14	0.4
Post Vaccinal	8	0.2
Other	166	4.6
Primary Encephalitis	2,002	55.8
Arthropod-borne	582	16.2
Etiology Unknown	1,420	39.6
Total	3,587	100.0

Table 2
Human Cases of Arthropod-Borne Encephalitis
Reported to the CDC Encephalitis Surveillance Unit
1955-1964

Year	Etiology				Total
	WEE	EEE	SLE	Calif.	
1955	37	15	107	0	159
1956	47	15	563	0	625
1957	35	5	147	0	187
1958	141	2	94	0	237
1959	14	36	118	0	168
1960	21	3	21	0	45
1961	27	1	42	0	70
1962	17	0	253	0	270
1963	56	0	19	1	76
1964	64	5	470	42	582*

*One case of encephalitis attributed to Tensaw virus (reported by Indiana) in included in the total.

*For definition of confirmed and presumptive, please consult CDC Encephalitis Surveillance Report 1964, page 10.

Table 3
Confirmed and Presumptive Human Cases of Arthropod-Borne Encephalitis by Age and Sex, 1964*

Age Group	SLE			WEE			California		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	13	5	18	10	11	21	3	3	6
5-9	14	9	23	3	3	6	12	7	19
10-14	14	8	22	4	1	5	5	4	9
15-19	8	13	21	1	1	2	1	0	1
20-29	24	24	48	3	1	4	1	0	1
30-39	29	31	60	6	0	6	0	0	0
40-49	23	36	59	7	0	7	0	0	0
50-59	24	29	53	1	2	3	0	0	0
60-69	36	40	76	0	2	2	0	0	0
70 & over	38	48	86	2	2	4	0	0	0
Unknown	2	2	4	3	1	4	2	0	2
Total	225	245	470	40	24	64	24	14	42*

*Includes 4 cases with unknown age and sex; 5 cases EEE and 1 case of Tensaw virus infection are not included.

The age and sex distribution of confirmed and presumptive cases of arthropod-borne encephalitis occurring in 1964 are shown in Table 3.

Tensow Virus

A case of clinical encephalitis associated with a fourfold rise in hemagglutination inhibition titer to Tensaw virus was reported from Indiana. The patient was a 13-year-old female from Kosciusko County who became ill on September 17, 1964. A rise of hemagglutination antibody titer from 40 to 160 was noted between the acute and convalescent serum specimens.

Arbovirus Isolations

A summary of arbovirus isolations from arthropod vectors during 1964 is shown in Table 4.

A number of arboviruses, such as Venezuelan equine encephalitis virus (VEE), Hart Park, Tensaw, Bunyamwara, and Cache Valley viruses, were isolated from mosquito pools. The relationship of these viruses to human illness is presently undefined.

In Table 5 isolations of arboviruses from birds and mammals are summarized.

These two tables demonstrate that there was widespread enzootic arbovirus activity in the United States during 1964.

St. Louis Encepholitis (SLE)

There were 470 laboratory-documented cases of St. Louis encephalitis reported from 14 States. Major epidemics were recorded in Harris County (Houston), Texas, and the Camden-Burlington County area of New Jersey. Epidemics with smaller numbers of cases occurred in Kentucky, Illinois, Indiana, and Tennessee. The only reported isolation of SLE virus from a human source was from a fatal case in Ohio.

Western Equine Encepholitis (WEE)

The 64 reported cases of Western equine encephalitis were notified from 10 States. However 31 cases occurred in two areas, Hale county, Texas, and central Colorado, and mixed infections with WEE and SLE were also recorded. In these two areas both WEE and SLE have been isolated from pools of *Culex tarsalis* mosquitoes.

Table 4
Arbovirus Isolations from Mosquitoes, 1964
Reported to Encephalitis Surveillance Unit, CDC

Mosquito Species	VIRUS ISOLATED								
	WEE	EEE	SLE	VEE	Calif.	Tensaw	Hart Park	Bunyamwara	Cache Valley
C. nigripulpus				X			X		
C. pipiens			X				X		
C. quinquefasciatus			X		X		X		
C. tarsalis	X						X		
Cs. melanoconion		X		X					
Cs. melanura	X	X					X		
A. infirmatus	X	X			X				
A. taeniorhynchus					X	X			
A. atlanticus					X				
A. crucians		X		X		X			
A. quadrimaculatus			X			?		X	?
A. nigromaculis	X								
A. species					X				
M. perturbans		X							

Table 5
Arbovirus Isolations from Birds and Mammals, 1964
Reported to Encephalitis Surveillance Unit

Bird or Mammal Species	Virus Isolated		
	EEE	SLE	WEE
Pheasant	X		
Exposure Chicks	X		X
House Sparrow		X	
Catbird		X	X
Chimney Swift		X	
Pigeon		X	
Redwing Blackbird			X
Blue Jay		X	
Swamp Sparrow	X		X
Mockingbird		X	
Robin			X
Domestic Goose		X	
Horse	X		X
Hamster			X
Cat			X
Mouse	X		X
Dog	X		

California Encephalitis (CE)

Forty-two cases of serologically confirmed or presumptive California encephalitis were reported, of which 25 cases were in Ohio and occurred primarily during August and September. There was no obvious geographic clustering, no county reporting more than two cases. The outbreak of California virus encephalitis which occurred in southern Indiana during August and September, 1964, was spread over five counties. There were 12 confirmed cases, the oldest patient being 16 years of age. This marked rise in reported California encephalitis in 1964 is in part due to increased efforts by various laboratories to test the sera of undiagnosed cases of encephalitis for California virus antibody.

Eastern Equine Encephalitis (EEE)

Five cases of Eastern equine encephalitis were reported in 1964, the patients being 2, 5, 17, 38 and 51 years of age respectively. Four of the cases were reported from Florida and one from Georgia. There were three deaths, one female aged 5 and two males aged 17 and 51.

Figure 1

REPORTED CASES OF ENCEPHALITIS BY MONTH
UNITED STATES, 1960-1964

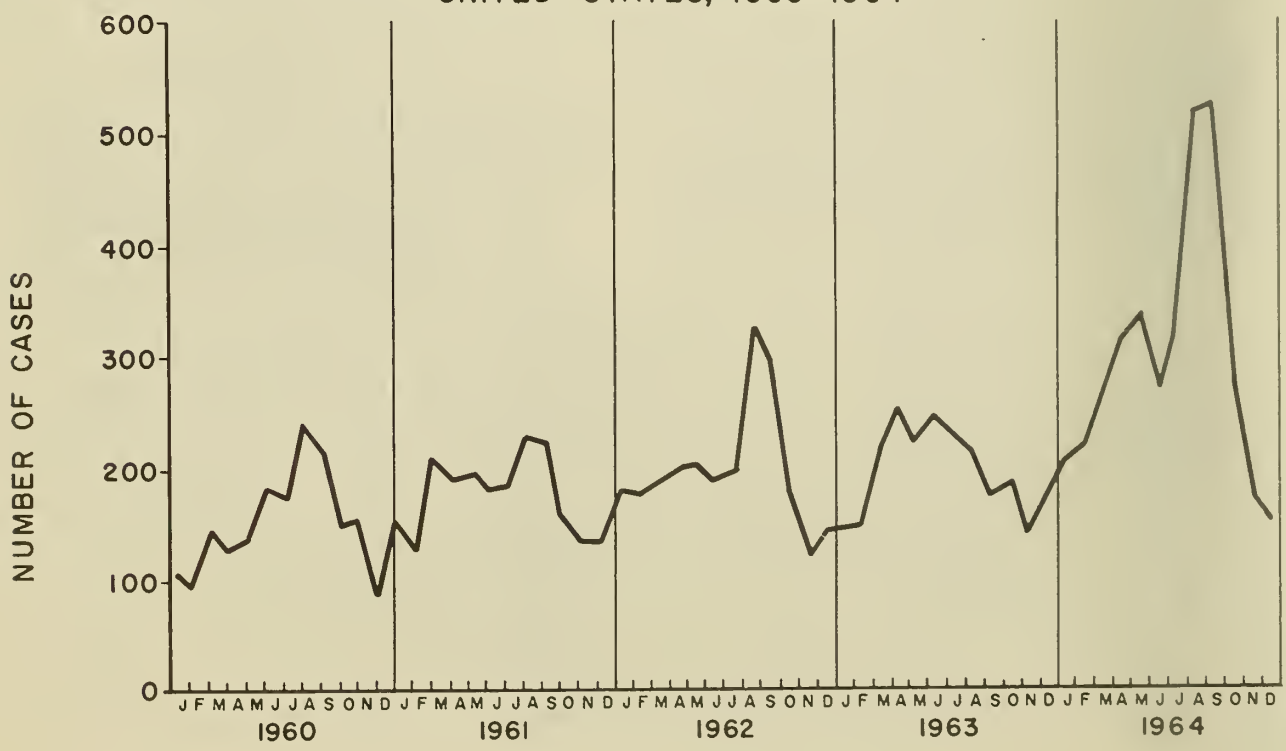


Figure 2

REPORTED CASES OF ENCEPHALITIS BY ETIOLOGIC GROUP AND MONTH OF ONSET, 1964

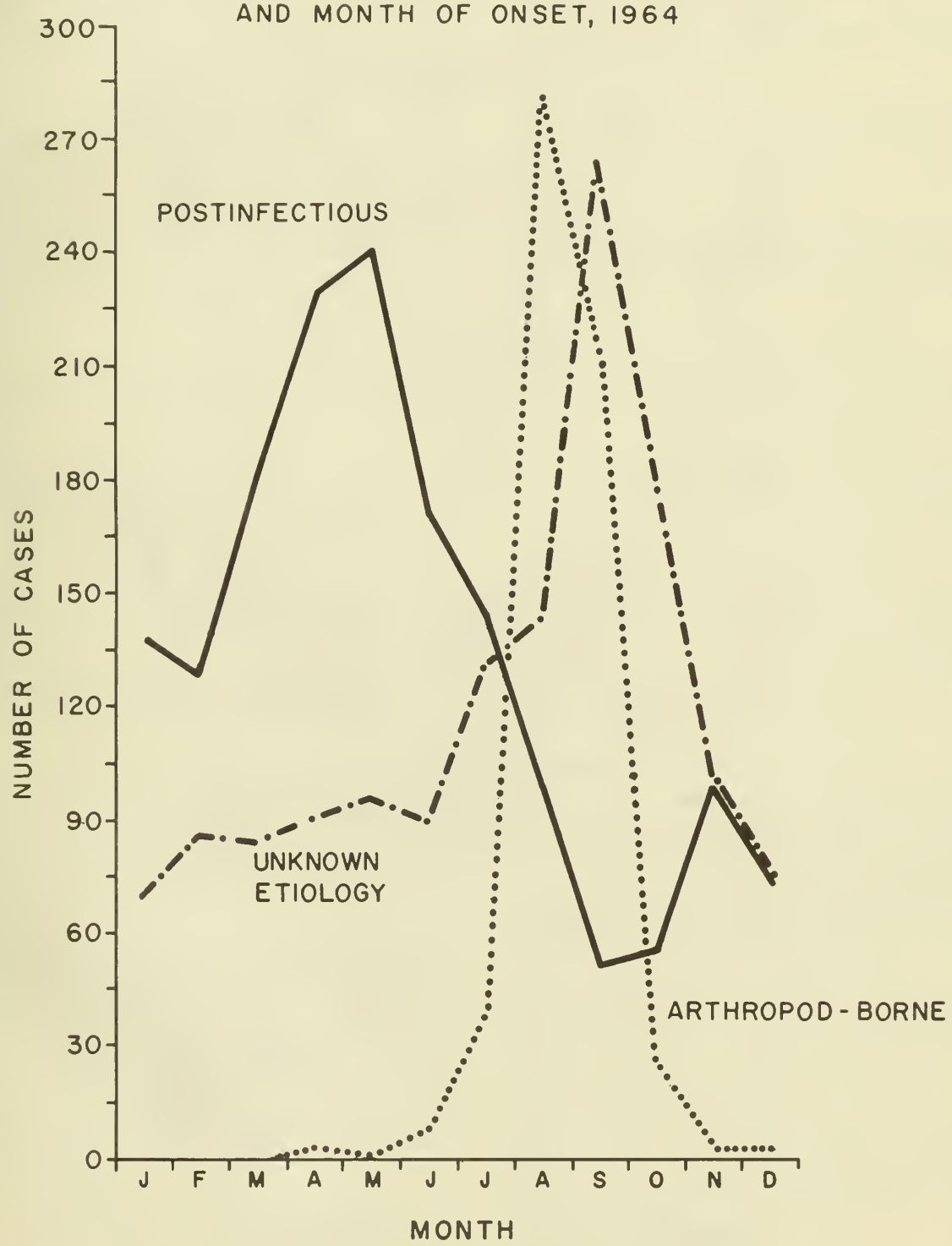
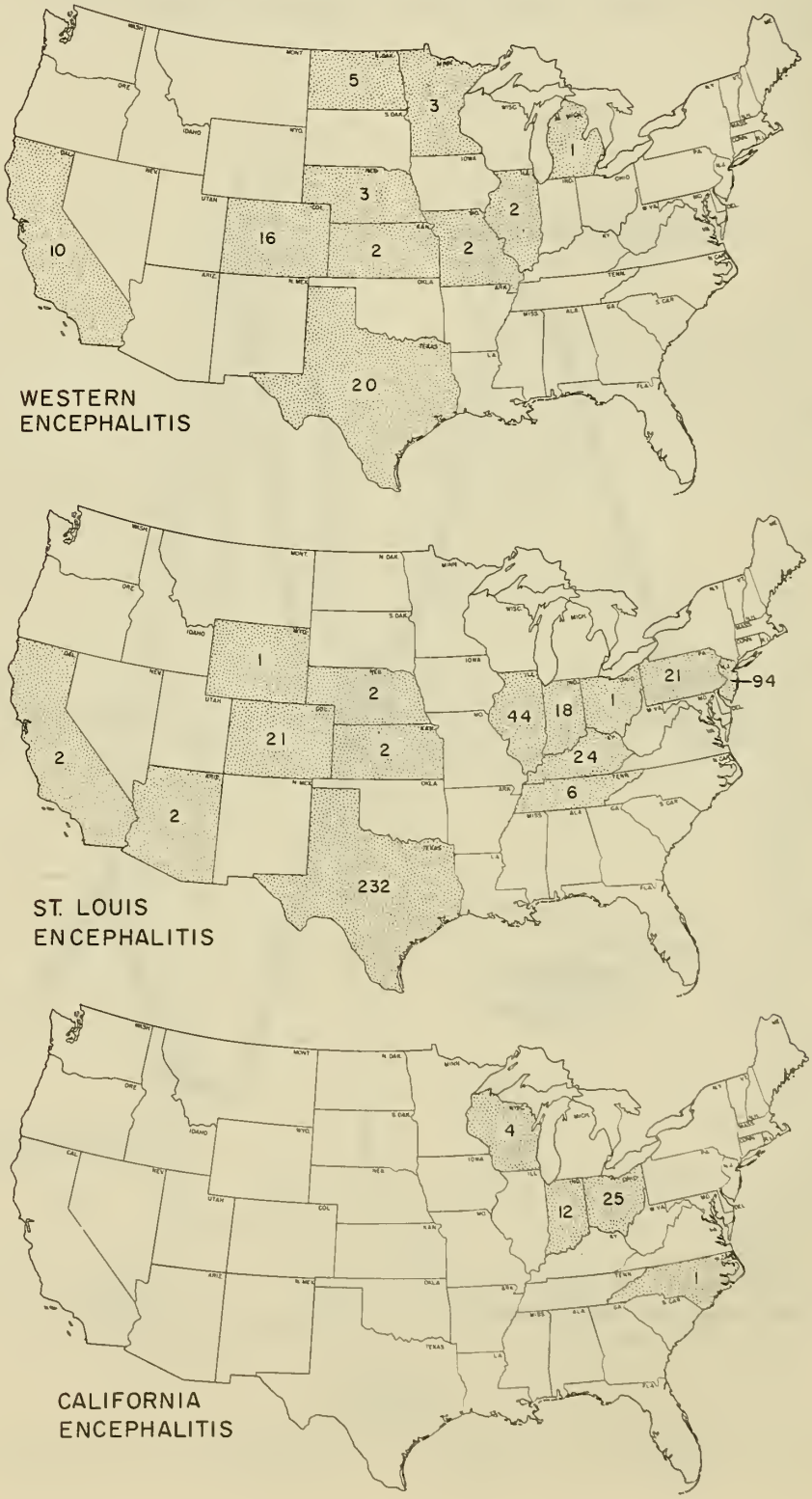


Figure 3

HUMAN CASES OF ARTHROPOD-BORNE ENCEPHALITIS
BY STATE, 1964



ENCEPHALITIS – Hale County, Texas, 1964

During the months of July through September 1964, an outbreak of encephalitis occurred in Hale County, Texas. This county (population 36,798; 1960 census) is located in the high plains area of the Texas Panhandle, an area known to be endemic for Western equine encephalitis (WEE) and St. Louis encephalitis (SLE) for at least the past 10 years. During 1964, 70 suspect cases occurred within Hale County, and 7 more cases were reported from places closely adjacent to this county.

Etiological investigations of 67 of these reported cases demonstrated serological evidence of infection with WEE in 24 cases and SLE in 7. Thirteen cases were found to be enterovirus-related (8 coxsackievirus B2, 4 echovirus 11, 1 poliovirus type 3), and were noted to closely resemble the arbovirus-related cases, both in relation to the time of onset and clinical manifestations (Table 1). Among the remainder of the reported cases, 2 demonstrated equivocal evidence of SLE infection, 21 had no laboratory evidence of WEE, SLE, or specific enterovirus infection, and specimens were judged inadequate or absent in 10 cases. Agglutination-lysis tests for leptospirosis were also performed on 23 of the sera, all with negative results.

The overall attack rate for WEE within the county was 51.6/100,000. The highest rates were among infants less than 12 months old (707/100,000), and children 1-4 years of age (107/100,000).

(Reported by Dr. Van C. Tupton, Director, Communicable Disease Division, Texas State Department of Health; and by the Greeley Field Station, and the Kansas City Field Station, CDC).

Table 1

Etiologic Confirmation of Suspected Cases of Central Nervous System Infections, Hale County, Texas - 1964

Etiologic category	Clinical diagnosis			Totals
	Encephalitis	Aseptic meningitis	Undifferentiated febrile illness	
Enteroviruses	4	7	2	13
WEE*	17	5	2	24
SLE*	4	2	1	7
Undiagnosed**	6	5	10	21
Totals	31	19	15	65

*Confirmed or presumptive cases only. (Two equivocal cases of SLE not included)

**An additional 10 cases are excluded in this table, because of lack of specimens for laboratory study.

SALMONELLA TYPHI – Rhode Island

An infection with *Salmonella typhi* in Rhode Island has been traced by phage typing to a chronic typhoid carrier of at least 4 years known duration. The carrier, a woman of 84 years of age, was also known to be the source of two previous cases of typhoid fever in Rhode Island in 1961.

The present index case of typhoid was a 12-year-old Negro female from the city of Providence who was admitted to the hospital on June 8, 1965. There was a one-week history of dizziness, anorexia, headache and fever. On admission the patient had a temperature of 104° and signs and symptoms which suggested inclusion of such conditions as posterior brain tumor, brain abscess and encephalitis in the differential diagnosis. During the clinical investigations, febrile agglutinins done by a quantitative test tube method were:

Typhoid H 1:1280	Typhoid O 1:2560
Paratyphoid B 1:2560	Paratyphoid E 1:1280

Three specimens of blood cultured on the day of admission were positive for *Salmonella typhi*.

The patient responded quickly to therapy with ampicillin and made a good recovery apart from a parotitis which developed on the 11th hospital day. There had been an exposure to mumps one week before admission to the hospital. Stool and urine cultures made during her stay in the hospital and a stool culture 2 weeks after discharge were all negative for *Salmonella typhi*.

The patient is one of a family of seven children, none of whom has had a similar illness, and stool cultures on parents and siblings have been uniformly negative. However, a next-door neighbor who had been in close contact with the patient and her siblings was the 84-year-old woman who was known to be a typhoid carrier. Phage typing of the *Salmonella typhi* organisms from both the patient and the carrier demonstrated "degraded N types reacting with the D group of phage". This very unusual phage type gives a strong epidemiologic indication of the source of infection.

(Reported by Dr. Joseph E. Cannon, Director of Health, State of Rhode Island Department of Health, and an EIS Officer).

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
JULY 24, 1965 AND JULY 18, 1964 (29th WEEK)

Area	Aseptic Meningitis		Encephalitis		Poliomyelitis						Diphtheria	
			Primary	Post-Inf.	Total Cases			Paralytic				
						Cumulative			Cumulative			Cum.
	1965	1964	1965	1965	1965	1965	1964	1965	1965	1964	1965	1965
UNITED STATES...	35	68	39	13	1	27	53	1	21	42	-	88
NEW ENGLAND.....	1	-	1	1	-	-	2	-	-	2	-	1
Maine.....	-	-	-	1	-	-	1	-	-	1	-	-
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts.....	1	-	1	-	-	-	-	-	-	-	-	1
Rhode Island.....	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut.....	-	-	-	-	-	-	1	-	-	1	-	-
MIDDLE ATLANTIC.....	1	8	11	1	-	1	7	-	-	7	-	5
New York City.....	-	5	4	-	-	1	1	-	-	1	-	3
New York, Up-State.	1	-	-	-	-	-	4	-	-	4	-	-
New Jersey.....	-	-	5	-	-	-	2	-	-	2	-	-
Pennsylvania.....	-	3	2	1	-	-	-	-	-	-	-	2
EAST NORTH CENTRAL...	4	9	8	1	-	1	7	-	-	6	-	3
Ohio.....	-	-	3	-	-	-	2	-	-	2	-	1
Indiana.....	-	1	-	-	-	-	-	-	-	-	-	2
Illinois.....	2	5	3	-	-	1	4	-	-	4	-	-
Michigan.....	2	3	1	1	-	-	1	-	-	-	-	-
Wisconsin.....	-	-	1	-	-	-	-	-	-	-	-	-
WEST NORTH CENTRAL...	3	2	4	4	-	5	3	-	5	2	-	18
Minnesota.....	3	2	1	4	-	1	1	-	1	1	-	7
Iowa.....	-	-	1	-	-	1	-	-	1	-	-	1
Missouri.....	-	-	-	-	-	-	2	-	-	1	-	1
North Dakota.....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota.....	-	-	1	-	-	-	-	-	-	-	-	7
Nebraska.....	-	-	-	-	-	3	-	-	3	-	-	1
Kansas.....	-	-	1	-	-	-	-	-	-	-	-	1
SOUTH ATLANTIC.....	4	5	2	-	-	-	18	-	-	13	-	23
Delaware.....	1	1	-	-	-	-	-	-	-	-	-	-
Maryland.....	-	-	-	-	-	-	1	-	-	1	-	-
Dist. of Columbia..	-	-	-	-	-	-	-	-	-	-	-	3
Virginia.....	-	1	-	-	-	-	-	-	-	-	-	-
West Virginia.....	-	1	-	-	-	-	1	-	-	1	-	-
North Carolina.....	1	-	1	-	-	-	8	-	-	4	-	2
South Carolina.....	-	-	-	-	-	-	-	-	-	-	-	1
Georgia.....	-	-	-	-	-	-	1	-	-	1	-	11
Florida.....	2	2	1	-	-	-	7	-	-	6	-	6
EAST SOUTH CENTRAL...	-	20	-	-	-	-	4	-	-	3	-	14
Kentucky.....	-	19	-	-	-	-	-	-	-	-	-	-
Tennessee.....	-	1	-	-	-	-	2	-	-	1	-	-
Alabama.....	-	-	-	-	-	-	2	-	-	2	-	13
Mississippi.....	-	-	-	-	-	-	-	-	-	-	-	1
WEST SOUTH CENTRAL...	12	8	4	-	1	12	4	1	10	4	-	19
Arkansas.....	-	-	-	-	-	-	-	-	-	-	-	2
Louisiana.....	1	1	-	-	-	1	-	-	1	-	-	2
Oklahoma.....	-	-	3	-	-	-	1	-	-	1	-	-
Texas.....	11	7	1	-	1	11	3	1	9	3	-	15
MOUNTAIN.....	-	2	4	-	-	5	6	-	3	3	-	-
Montana.....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho.....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming.....	-	-	-	-	-	-	2	-	-	2	-	-
Colorado.....	-	2	1	-	-	-	1	-	-	1	-	-
New Mexico.....	-	-	-	-	-	1	3	-	1	-	-	-
Arizona.....	-	-	1	-	-	4	-	-	2	-	-	-
Utah.....	-	-	2	-	-	-	-	-	-	-	-	-
Nevada.....	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	10	14	5	6	-	3	2	-	3	2	-	5
Washington.....	1	-	-	-	-	2	-	-	2	-	-	-
Oregon.....	-	-	1	-	-	-	1	-	-	1	-	1
California.....	9	14	4	6	-	1	1	-	1	1	-	4
Alaska.....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii.....	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-	-	-	-	6

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

JULY 24, 1965 AND JULY 18, 1964 (29th WEEK) - Continued

Area	Brucellosis	Infectious Hepatitis including Serum Hepatitis					Meningococcal Infections			Tetanus	
		Total incl. unk.	Under 20 years	20 years and over	Cumulative Totals			Cumulative			Cum.
	1965	1965	1965	1965	1965	1964	1965	1965	1964	1965	1965
UNITED STATES...	6	558	228	306	19,729	23,131	38	2,082	1,711	8	132
NEW ENGLAND.....	1	30	14	15	1,191	2,282	3	106	47	-	5
Maine.....	-	6	2	4	223	748	2	14	5	-	-
New Hampshire.....	-	5	2	2	111	166	-	5	1	-	1
Vermont.....	-	3	2	1	67	285	1	6	1	-	-
Massachusetts.....	-	10	6	4	463	471	-	34	19	-	3
Rhode Island.....	1	1	-	1	147	125	-	14	7	-	-
Connecticut.....	-	5	2	3	180	487	-	33	14	-	1
MIDDLE ATLANTIC.....	-	97	33	64	3,483	5,247	7	278	205	-	8
New York City.....	-	34	5	29	665	772	3	49	28	-	-
New York, Up-State.	-	27	11	16	1,390	2,365	3	75	58	-	3
New Jersey.....	-	18	7	11	641	945	1	74	71	-	-
Pennsylvania.....	-	18	10	8	787	1,165	-	80	48	-	5
EAST NORTH CENTRAL...	2	97	47	47	3,792	3,509	10	280	238	-	13
Ohio.....	-	18	5	13	1,062	925	2	73	63	-	1
Indiana.....	-	14	8	6	330	309	1	38	36	-	6
Illinois.....	2	20	11	8	705	615	2	73	60	-	4
Michigan.....	-	36	17	19	1,452	1,403	5	62	53	-	-
Wisconsin.....	-	9	6	1	243	257	-	34	26	-	2
WEST NORTH CENTRAL...	1	21	4	12	1,220	1,256	1	107	106	1	9
Minnesota.....	1	4	-	3	119	123	-	21	25	1	6
Iowa.....	-	10	1	5	452	178	-	7	6	-	1
Missouri.....	-	4	1	3	259	321	1	49	52	-	1
North Dakota.....	-	-	-	-	17	49	-	7	11	-	-
South Dakota.....	-	-	-	-	16	106	-	2	-	-	-
Nebraska.....	-	1	1	-	43	32	-	10	6	-	1
Kansas.....	-	2	1	1	314	447	-	11	6	-	-
SOUTH ATLANTIC.....	1	51	20	27	2,022	2,185	5	407	357	2	37
Delaware.....	-	-	-	-	59	41	-	5	6	-	-
Maryland.....	-	6	3	3	375	420	-	38	25	-	1
Dist. of Columbia..	-	-	-	-	26	34	1	8	12	-	-
Virginia.....	1	9	-	6	468	338	-	48	40	-	7
West Virginia.....	-	8	6	2	302	347	1	24	26	-	1
North Carolina.....	-	17	8	9	176	393	-	78	60	-	5
South Carolina.....	-	3	2	1	82	75	-	56	48	-	3
Georgia.....	-	2	-	2	76	52	2	53	46	-	4
Florida.....	-	6	1	4	458	485	1	97	94	2	16
EAST SOUTH CENTRAL...	-	40	19	18	1,410	1,605	1	164	152	1	19
Kentucky.....	-	18	11	4	494	650	-	67	52	1	5
Tennessee.....	-	10	4	6	497	542	1	48	50	-	5
Alabama.....	-	5	1	4	240	271	-	30	32	-	8
Mississippi.....	-	7	3	4	179	142	-	19	18	-	1
WEST SOUTH CENTRAL...	1	69	34	33	1,716	1,716	4	292	209	4	25
Arkansas.....	-	6	1	5	229	176	-	14	19	2	6
Louisiana.....	-	8	5	3	293	393	1	163	103	1	4
Oklahoma.....	1	1	1	-	40	91	1	18	7	-	1
Texas.....	-	54	27	25	1,154	1,056	2	97	80	1	14
MOUNTAIN.....	-	23	9	8	1,155	1,410	1	62	62	-	3
Montana.....	-	3	2	-	86	127	-	2	-	-	-
Idaho.....	-	1	-	-	160	157	-	8	3	-	-
Wyoming.....	-	1	-	1	33	45	-	4	3	-	-
Colorado.....	-	12	6	6	239	388	-	13	11	-	2
New Mexico.....	-	2	1	1	246	199	-	10	26	-	-
Arizona.....	-	3	-	-	226	327	-	16	5	-	1
Utah.....	-	-	-	-	158	125	1	7	6	-	-
Nevada.....	-	1	-	-	7	42	-	2	8	-	-
PACIFIC.....	-	130	48	82	3,740	3,921	6	386	335	-	13
Washington.....	-	2	-	2	297	441	-	31	25	-	-
Oregon.....	-	11	6	5	309	435	-	28	20	-	3
California.....	-	113	42	71	2,938	2,844	6	307	273	-	10
Alaska.....	-	1	-	1	164	122	-	13	7	-	-
Hawaii.....	-	3	-	3	32	79	-	7	10	-	-
Puerto Rico	-	25	20	5	771	572	1	5	30	3	24

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
JULY 24, 1965 AND JULY 18, 1964 (29th WEEK) - Continued

Area	Measles			Strept. Sore Th. & Scarlet Fev.	Tularemia		Typhoid Fever		Rabies in Animals	
		Cumulative				Cum.		Cum.		Cum.
	1965	1965	1964	1965	1965	1965	1965	1965	1965	1965
UNITED STATES...	1,910	233,962	452,634	4,144	5	138	12	209	67	2,694
NEW ENGLAND....	73	36,546	16,025	395	-	-	-	3	-	30
Maine.....	11	2,764	2,787	92	-	-	-	-	-	3
New Hampshire.....	3	381	237	-	-	-	-	-	-	1
Vermont.....	13	1,244	2,258	1	-	-	-	-	-	24
Massachusetts.....	32	19,163	4,886	26	-	-	-	2	-	1
Rhode Island.....	4	3,885	1,853	6	-	-	-	1	-	-
Connecticut.....	10	9,109	4,004	270	-	-	-	-	-	1
MIDDLE ATLANTIC.....	224	14,054	51,294	132	-	-	2	35	3	109
New York City.....	83	2,107	15,101	2	-	-	-	17	-	-
New York, up-State.	49	3,963	12,282	78	-	-	2	10	3	98
New Jersey.....	48	2,389	12,045	46	-	-	-	2	-	-
Pennsylvania.....	44	5,595	11,866	6	-	-	-	6	-	11
EAST NORTH CENTRAL...	737	53,553	100,865	245	1	11	5	32	11	407
Ohio.....	47	8,741	19,367	19	-	-	1	7	8	210
Indiana.....	14	1,715	22,455	87	1	4	-	9	2	39
Illinois.....	67	2,472	16,099	34	-	5	1	7	-	72
Michigan.....	274	25,804	28,412	74	-	1	1	4	1	40
Wisconsin.....	335	14,821	14,532	31	-	1	2	5	-	46
WEST NORTH CENTRAL...	38	16,260	29,938	144	1	15	1	6	18	550
Minnesota.....	2	619	327	2	-	1	-	-	3	111
Iowa.....	3	8,938	23,167	17	-	-	-	1	8	160
Missouri.....	2	2,552	1,005	7	-	10	-	4	3	74
North Dakota.....	31	3,593	4,619	80	-	-	-	-	1	33
South Dakota.....	-	109	8	8	1	2	-	-	1	39
Nebraska.....	-	449	812	-	-	-	1	1	2	31
Kansas.....	NN	NN	NN	30	-	2	-	-	-	102
SOUTH ATLANTIC.....	188	24,028	37,597	542	-	27	3	44	13	368
Delaware.....	-	498	398	37	-	-	-	4	-	-
Maryland.....	27	1,094	3,382	120	-	-	2	14	4	9
Dist. of Columbia..	2	71	353	5	-	-	-	-	-	-
Virginia.....	44	3,766	12,599	114	-	5	-	3	4	257
West Virginia.....	56	13,286	8,369	131	-	-	-	1	-	17
North Carolina.....	3	372	1,137	2	-	5	1	13	-	2
South Carolina.....	11	1,004	4,213	24	-	3	-	4	-	2
Georgia.....	8	612	159	-	-	14	-	2	2	36
Florida.....	37	3,325	6,987	109	-	-	-	3	3	45
EAST SOUTH CENTRAL...	81	13,434	66,732	720	1	16	-	21	5	610
Kentucky.....	8	2,394	18,249	20	-	3	-	6	1	60
Tennessee.....	42	7,686	23,648	558	1	12	-	7	4	537
Alabama.....	23	2,275	18,174	30	-	1	-	4	-	10
Mississippi.....	8	1,079	6,661	112	-	-	-	4	-	3
WEST SOUTH CENTRAL...	153	30,138	70,809	498	2	51	-	30	9	429
Arkansas.....	-	1,080	1,051	-	2	34	-	10	1	59
Louisiana.....	3	94	96	-	-	1	-	5	1	65
Oklahoma.....	1	201	974	21	-	8	-	2	2	76
Texas.....	149	28,763	68,688	477	-	8	-	13	5	229
MOUNTAIN.....	197	19,204	17,642	830	-	13	-	14	5	55
Montana.....	34	3,647	2,840	31	-	2	-	-	-	3
Idaho.....	54	2,690	1,818	84	-	-	-	-	-	-
Wyoming.....	5	839	240	17	-	3	-	1	-	-
Colorado.....	49	5,524	3,055	345	-	-	-	-	3	7
New Mexico.....	6	663	390	202	-	-	-	8	-	11
Arizona.....	31	1,199	6,422	46	-	-	-	5	2	33
Utah.....	18	4,440	1,898	105	-	8	-	-	-	1
Nevada.....	-	202	979	-	-	-	-	-	-	-
PACIFIC.....	219	26,745	61,732	638	-	5	1	24	3	136
Washington.....	16	7,195	19,924	66	-	-	-	2	1	6
Oregon.....	20	3,133	8,316	13	-	2	-	3	-	3
California.....	75	12,613	31,991	482	-	3	1	18	2	125
Alaska.....	-	142	1,073	8	-	-	-	-	-	2
Hawaii.....	108	3,662	428	69	-	-	-	1	-	-
Puerto Rico	40	2,180	5,296	7	-	-	-	3	-	11

Week No. 29

Table 4. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED JULY 24, 1965

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over		
NEW ENGLAND:	690	404	36	38
Boston, Mass.	225	111	10	16
Bridgeport, Conn.	36	17	3	4
Cambridge, Mass.	29	17	-	2
Fall River, Mass.	34	23	-	1
Hartford, Conn.	50	31	2	5
Lowell, Mass.	23	16	-	1
Lynn, Mass.	24	15	2	2
New Bedford, Mass.	28	21	1	-
New Haven, Conn.	42	27	1	1
Providence, R. I.	63	39	5	3
Somerville, Mass.	14	8	4	-
Springfield, Mass.	48	30	6	1
Waterbury, Conn.	20	13	-	1
Worcester, Mass.	54	36	2	1
MIDDLE ATLANTIC:	3,003	1,707	95	151
Albany, N. Y.	37	22	2	3
Allentown, Pa.	32	19	-	2
Buffalo, N. Y.	125	78	1	9
Camden, N. J.	32	11	1	5
Elizabeth, N. J.	24	10	1	2
Erie, Pa.	45	25	2	2
Jersey City, N. J.	52	30	4	7
Newark, N. J.	75	40	3	6
New York City, N. Y.	1,484	832	48	61
Paterson, N. J.	32	18	3	1
Philadelphia, Pa.	514	290	7	31
Pittsburgh, Pa.	186	94	3	9
Reading, Pa.	42	29	7	2
Rochester, N. Y.	92	57	6	1
Schenectady, N. Y.	26	14	1	2
Scranton, Pa.	48	40	-	1
Syracuse, N. Y.	60	40	-	3
Trenton, N. J.	45	27	1	1
Utica, N. Y.*	26	19	2	1
Yonkers, N. Y.	26	12	3	2
EAST NORTH CENTRAL:	2,526	1,361	72	165
Akron, Ohio	71	38	1	4
Canton, Ohio	42	24	2	3
Chicago, Ill.	708	356	32	63
Cincinnati, Ohio	163	102	-	13
Cleveland, Ohio	229	125	1	7
Columbus, Ohio	115	64	4	5
Dayton, Ohio	80	39	-	6
Detroit, Mich.	359	186	10	19
Evansville, Ind.	40	29	2	1
Flint, Mich.	57	26	-	4
Fort Wayne, Ind.	44	26	4	2
Gary, Ind.	31	17	2	3
Grand Rapids, Mich.	33	20	-	3
Indianapolis, Ind.	140	67	5	12
Madison, Wis.	33	15	-	5
Milwaukee, Wis.	139	88	2	5
Peoria, Ill.	28	10	-	3
Rockford, Ill.	32	18	5	3
South Bend, Ind.	27	18	2	-
Toledo, Ohio	101	67	-	2
Youngstown, Ohio	54	26	-	2
WEST NORTH CENTRAL:	804	472	16	56
Des Moines, Iowa	61	34	-	6
Duluth, Minn.	33	28	-	-
Kansas City, Kans.	47	25	3	4
Kansas City, Mo.	124	75	3	10
Lincoln, Nebr.	19	16	1	-
Minneapolis, Minn.	111	65	-	7
Omaha, Nebr.	62	25	2	4
St. Louis, Mo.	236	143	4	13
St. Paul, Minn.	70	40	-	6
Wichita, Kans.	41	21	3	6
SOUTH ATLANTIC:	1,040	503	48	82
Atlanta, Ga.	107	44	7	4
Baltimore, Md.	269	120	9	23
Charlotte, N. C.	27	14	2	1
Jacksonville, Fla.	55	28	1	3
Miami, Fla.	80	40	1	6
Norfolk, Va.	56	26	1	6
Richmond, Va.	75	38	-	7
Savannah, Ga.	18	7	2	2
St. Petersburg, Fla.	62	45	9	1
Tampa, Fla.	58	30	4	5
Washington, D. C.	177	87	9	13
Wilmington, Del.	56	24	3	11
EAST SOUTH CENTRAL:	567	283	25	42
Birmingham, Ala.	77	35	-	9
Chattanooga, Tenn.	33	20	-	5
Knoxville, Tenn.	34	22	-	-
Louisville, Ky.	128	60	12	7
Memphis, Tenn.	119	61	3	6
Mobile, Ala.	41	14	2	6
Montgomery, Ala.	45	23	4	1
Nashville, Tenn.	90	48	4	8
WEST SOUTH CENTRAL:	1,055	526	36	101
Austin, Tex.	30	17	2	4
Baton Rouge, La.	31	10	-	1
Corpus Christi, Tex.	25	14	1	3
Dallas, Tex.	146	73	1	17
El Paso, Tex.	41	23	6	9
Fort Worth, Tex.	69	33	4	4
Houston, Tex.	178	82	1	15
Little Rock, Ark.	51	22	-	3
New Orleans, La.	180	100	4	16
Oklahoma City, Okla.	82	39	1	1
San Antonio, Tex.	98	60	4	5
Shreveport, La.	54	22	5	12
Tulsa, Okla.	70	31	7	11
MOUNTAIN:	355	198	15	28
Albuquerque, N. Mex.	33	18	1	2
Colorado Springs, Colo.	21	9	2	3
Denver, Colo.	104	58	4	6
Ogden, Utah	15	12	5	-
Phoenix, Ariz.	70	37	-	8
Pueblo, Colo.	14	8	-	2
Salt Lake City, Utah	53	36	2	5
Tucson, Ariz.	45	20	1	2
PACIFIC:	1,598	916	43	89
Berkeley, Calif.	12	7	1	1
Fresno, Calif.	36	13	-	4
Glendale, Calif.	52	38	3	1
Honolulu, Hawaii	51	26	1	5
Long Beach, Calif.	60	33	-	1
Los Angeles, Calif.	537	298	19	35
Oakland, Calif.	118	62	2	3
Pasadena, Calif.	28	22	-	-
Portland, Oreg.	115	72	1	7
Sacramento, Calif.	68	37	-	7
San Diego, Calif.	99	55	5	4
San Francisco, Calif.	188	111	4	13
San Jose, Calif.	33	16	1	1
Seattle, Wash.	124	72	2	6
Spokane, Wash.	57	42	1	1
Tacoma, Wash.	20	12	3	-
Total	11,638	6,370	386	752

*Estimate - based on average percent of divisional total.

Cumulative Totals
including reported corrections for previous weeks

All Causes, All Ages	366,137
All Causes, Age 65 and over	207,611
Pneumonia and Influenza, All Ages	15,677
All Causes, Under 1 Year of Age	21,741

INTERNATIONAL NOTES – QUARANTINE MEASURES

Immunization Information for International Travel
1963-64 edition–Public Health Service Publication No. 384

The following changes should be made in the list of Yellow Fever Vaccination Centers in Section 6:

Page 73

ADD

City: Lansing, Michigan

Center: Ingham County Health Department
119 W. Washtenaw
Telephone - 487-6001

Clinic Hours: By Appointment

Fee: Yes

Page 78

DELETE

City: Houston, Texas

Center: The Methodist Hospital
Texas Medical Center
6516 Bertner

Clinic Hours: Monday–Friday, 8:00 a.m.–4:00 p.m.
By appointment

Fee: Yes

ADD

City: Houston, Texas

Center: The Methodist Hospital
Texas Medical Center
6516 Bertner
Telephone JA 6-3311

Clinic Hours: By appointment

Fee: Yes

THE MDRBIDITY AND MDRTALITY WEEKLY REPORT, WITH A CIRCULATIDN DF 13,900 IS PUBLISHED BY THE COMMUNICABLE DISEASE CENTER, ATLANTA, GEDRGIA 30333.

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IN ADDITIDN TD THE ESTABLISHED PRDCEDURES FDR REPORTING MORBIDITY AND MDRTALITY, THE CDMMUNICABLE DISEASE CENTER WELCDMES ACCDUNTS DF INTERESTING DUTBREAKS DR CASES, SUCH ACCDUNTS SHDULD BE ADDRESSED TD:

THE EDITDR
MDRBIDITY AND MORTALITY WEEKLY REPDRT
CDMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA 30333

NDTE: THESE PRDVISIDNAL DATA ARE BASED DN WEEKLY TELEGRAMS TD THE CDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CDNCLUDES DN SATURDAY; CDMPILED DATA DN A NATIDNAL BASIS ARE RELEASED DN THE SUCCEEDING FRIDAY.

SYMBOLS: --- DATA NOT AVAILABLE
- QUANTITY ZERD

THE CONSTRUCTIDN DF THE MORTALITY CURVES IS DESCRIBED IN VOL. 14, ND. 1.